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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,106	11/17/2003	Harue Nakashima	0553-0382	3243

7590 05/11/2005

COOK, ALEX, McFARRON, MANZO
CUMMINGS & MEHLER, LTD.
SUITE 2850
200 WEST ADAMS STREET
CHICAGO, IL 60606

EXAMINER

GARRETT, DAWN L

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 05/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/715,106

Applicant(s)

NAKASHIMA ET AL.

Examiner

Dawn Garrett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-6 and 10-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-6 and 10-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7-30-2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2-28-05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This Office action is responsive to the amendment dated February 28, 2005. Claims 1-3 and 7-9 are canceled. Claims 4 and 5 were amended. Claims 11-34 have been added. Claims 4-6 and 10-34 are pending.
2. The objection to the abstract set forth in the last Office action (mailed November 29, 2004), paragraph 1, is withdrawn due to the new abstract.
3. The rejection of claims 1-3 and 7-9 under 35 USC 102(b) as being anticipated by Suzuki et al. (JP 2001-043976 A) is withdrawn due to the cancellation of these claims.
4. The rejection of claims 1-3 and 7-9 under 35 USC 102(e) as being anticipated by Kim et al. (US 2002/0045063) is withdrawn due to the cancellation of these claims.
5. It is suggested the word "weight" be inserted between "low" and "molecular" in claims 11, 13, 14, 19, 21, 22, 27, 29, and 30.
6. The indication of allowable subject matter set forth in the last Office action, paragraph 6 is withdrawn upon further consideration of the claims.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4, 5, and 11-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. (JP 2001-043976 A) in view of Mueller et al. (US 6316786). Suzuki et al. discloses

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an organic electroluminescent element comprising at least one organic layer, which comprises a compound of a tetravalent metal. Preferably the organic layer is a luminescent layer (see abstract). Formula (1) at paragraph 27 reads upon the instant formula 1. Also, formula (2) at par. 31 and formula (3) at par. 32 read upon the instant formula 1. Formula (6) at par. 43 further reads upon the instant formula 1. The compound is placed in a luminous layer and is further doped with a fluorescent compound (see par. 33, Example 5). Although Suzuki et al. teaches a further compound that is fluorescent may be included in the luminescent layer, Suzuki et al. fails to specify a red luminescent compound such as DCM1, DCM2 or DCJT. Mueller et al. teaches in analogous art that each of DCM1, DCM2, or DCJT are well known luminescent dopants (see col. 11, line 66 to col. 12, line 24). It would have been obvious to one of ordinary skill in the art to have included one of DCM1, DCM2 or DCJT in the luminescent layer of Suzuki et al., because Suzuki et al. generally teaches emissive dopants may be included and Mueller et al. teaches DCM1, DCM2 and DCJT are well known dopants for an emissive layer.

9. Claims 6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. (JP 2001-043976 A) in view of Littman et al. (US 5,405,709). Suzuki et al. discloses an organic electroluminescent element comprising at least one organic layer, which comprises a compound of a tetravalent metal. Preferably the organic layer is a luminescent layer (see abstract). Formula (1) at paragraph 27 reads upon the instant formula 1. Also, formula (2) at par. 31 and formula (3) at par. 32 read upon the instant formula 1. Formula (6) at par. 43 further reads upon the instant formula 1. The compound is placed in a luminous layer and is further doped with a fluorescent compound (see par. 33, Example 5). Suzuki et al. fails to teach the layers emit white light. Littman et al. teaches in analogous art that it is possible to produce an

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organic electroluminescent device that emits white light by combining fluorescent materials emitting different colors. It would have been obvious to one of ordinary skill in the art to have selected a fluorescent dopant for the luminescent layer of the Suzuki et al. device resulting in the emission of white light, because Littman et al. teaches white light emission of a luminescent layer may be obtained by combining different emitting materials.

Response to Arguments


10. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dawn Garrett whose telephone number is (571)272-1523. The examiner can normally be reached Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached at (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


DAWN GARRETT
PRIMARY EXAMINER